

Exhibit 3

The Illustrated Dictionary of Electronics

Seventh Edition

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reverse recovery time See RECOVERY TIME, 1.

reverse resistance Symbol, R_r . The resistance of a reverse-biased pn junction. Also called BACK RESISTANCE. Compare FORWARD RESISTANCE.

reverse voltage Symbol, E_r or V_r . Direct-current voltage applied to a pn junction so that the p-type material is electrically more negative than the n-type material. Also called BACK VOLTAGE. Compare VOLTAGE.

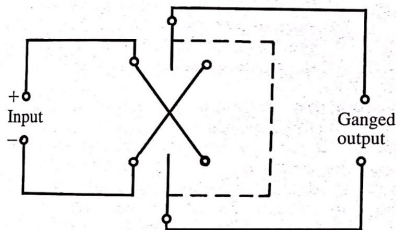
reverse-voltage capacitance The internal capacitance of a reverse-biased semiconductor pn junction.

reverse voltage drop The voltage drop across a semiconductor pn junction that is biased in the reverse (low-conduction) direction.

reversible counter A counter that, by a control signal, can have the value it is holding either increased or decreased.

reversible permeability The permeability of a ferromagnetic substance when the magnitude of the alternating-current field is arbitrarily small.

reversing switch 1. A switch that reverses the polarity of a direct-current voltage. 2. A switch that reverses the direction of motor rotation.



reversing switch

revolute geometry A method by which a robot arm can move freely in three dimensions. The entire assembly rotates from the base in a horizontal plane through a complete circle (360 degrees). An elevation joint at the base moves the arm from horizontal to vertical (90 degrees). A joint in the middle of the arm can bend through about 180 degrees.

revolution Abbreviation, r or rev. One complete rotation (i.e., 360 degrees of circular travel).

revolving field See ROTATING FIELD.

rewind To run a magnetic tape on a transport at a high speed, in the direction opposite to that associated with the play mode.

rewrite In computer operations, to return information read from a storage location to that location by recording.

R_f Symbol for FILAMENT RESISTANCE.

RF Abbreviation of RADIO FREQUENCY.

RF amplifier See RADIO-FREQUENCY AMPLIFIER.

RFC Abbreviation of RADIO-FREQUENCY CHOKE.

RF heating See RADIO-FREQUENCY HEATING.

RFI Abbreviation of RADIO-FREQUENCY INTERFERENCE.

RF inverse feedback A negative-feedback system for radiophone transmitters, in which a portion of the modulated radio-frequency (RF) signal is rectified, and the resulting direct-current voltage is filtered and applied as bias to one of the audio stages in the proper polarity for degeneration.

RF lamp A lighting lamp, used with radio-frequency (RF) alternating current, rather than the conventional 60-Hz utility current. This results in better efficiency, and allows much more light to be generated with a given filament lamp, as compared with 60-Hz current.

RF motion detector In security systems, an intrusion detection and alarm system that senses Doppler-effect-induced changes in the frequency or phase of a radio-frequency (RF) electromagnetic field. The Doppler effect results from motion of objects in the secured area.

RFO Abbreviation of radio-frequency oscillator.

RF power supply See OSCILLATOR-TYPE POWER SUPPLY.

RF probe See RECTIFIER PROBE.

RF resistance See RADIO-FREQUENCY RESISTANCE.

RF selectivity See RADIO-FREQUENCY SELECTIVITY.

RF transistor See RADIO-FREQUENCY TRANSISTOR.

R_g Symbol for GRID RESISTANCE.

R_G Symbol for GATE RESISTANCE.

RGB Abbreviation of RED-GREEN-BLUE.

RGT Abbreviation of RESONANT-GATE TRANSISTOR.

Rh Symbol for RHODIUM.

R/h Abbreviation of ROENTGENS PER HOUR.

R_H 1. Symbol for HEATER RESISTANCE. 2. Symbol for HOT RESISTANCE.

rh Abbreviation of RELATIVE HUMIDITY.

rhений Symbol, Re. A metallic element. Atomic number, 75. Atomic weight, 186.207. It is used in some thermocouples.

rheostat A wirewound variable dropping resistor of the rotary type or slider type.

R_{HF} Symbol for high-frequency resistance (see RADIO-FREQUENCY RESISTANCE).

RHI Abbreviation of RANGE-HEIGHT INDICATOR.

rhodium Symbol, Rh. A metallic element. Atomic number, 45. Atomic weight, 102.906.

rhombus A four-sided geometric plane figure, in which all four sides have equal length, and opposite angles have equal measure.

rhombic antenna See DIAMOND ANTENNA.